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- (71) Applicant (for all designated States except US): UL-
TRADNS, INC. [US/US]; 4004 Eagle Nest Lane,
Danville, CA 94506 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LACHMAN,
Ronald [US/US]; 3140 Wisperswoods Court, Northbrook,
IL 60062 (US). HOTZ, Steve, Michael [US/US]; 8143 Zi-
tola Terrace, Plya Del Ray, CA 90293 (US). MANNING,
William, Carl [US/US]; 309 West Sycamore, El Segundo,
CA 90245 (US). PETERSON, Alec, Harkness [US/US];
Apartment 205, 8173 West Eastman Place, Lakewood,
CO 80227 (US). HOTZ, Michael, Allen [US/US]; 16247
South 40th Way, Phoenix, AZ 85044 (US). JOFFE,
Rodney, L. [US/US]; 4627 East Sanna Street, Phoenix,
AZ 85028 (US).
- (74) Agents: ECCLESTON, Lynn, E. et al.; Pillsbury Madi-
son & Sutro, LLP, 1100 New York Avenue, N.W., Wash-
ington, DC 20005 (US).
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(54) Title: SCALABLE AND EFFICIENT DOMAIN NAME RESOLUTION

(57) Abstract: A domain name server (DNS) system for processing domain name requests includes a query mechanism constructed and adapted to obtain a user request for response information corresponding to a particular domain name; and provide complete response information in a single response to the user request. The user request may be a domain name resolution request and the query mechanism provides an Internet Protocol (IP) address corresponding to the domain name. A different response may be provided, depending on context information. The system may include an Internet protocol processor and an underlying database repository. The system incorporates a database layout and associated database query strategy that may comprise multiple components which significantly reduces the transaction processing time and overhead as compared to conventional implementations.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L29/12				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04L G06F				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, IBM-TDB, COMPENDEX				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X A	EP 0 800 143 A (SUN MICROSYSTEMS INC) 8 October 1997 (1997-10-08) page 2, line 57 -page 3, line 10 page 5, line 30-42 page 6, line 27-34 ---	1,2,12 3-11, 13-22		
X A	EP 0 817 444 A (SUN MICROSYSTEMS INC) 7 January 1998 (1998-01-07) column 2, line 20-39 column 3, line 14-21 column 3, line 47 -column 4, line 38 column 5, line 49 -column 6, line 22 figure 3 --- -/--	12,13 1-11, 14-22		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.				
° Special categories of cited documents :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; border: none; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer <p style="text-align: center; font-size: 1.2em;">Lázaro López, M.L.</p>		

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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